PTO/SB/21 (09-04)

Approved for use through 7/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

TRANSMITTAL **FORM**

10/753,677 Application Number January 8, 2004 Filing Date Tharp, Charles E. First Named Inventor Art Unit 1724 **Examiner Name** Charles S. Bushey Attorney Docket Number 55599.098470

(to be used for all correspondence after initial filing)

Total Number of Pages in This Submission

Typed or printed name

ENCLOSURES (check all that apply) Fee Transmittal Form Drawing(s) After Allowance Communication TC Fee Attached Licensing-related Papers Appeal Communication to Board of Appeals and Interferences Amendment / Reply Petition Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) After Final Petition to Convert to a Provisional Proprietary Information Application Affidavits/declaration(s) Power of Attorney, Revocation Status Letter Change of Correspondence Address Other Enclosure(s) (please identify Extension of Time Request Terminal Disclaimer below); return postcard Request for Refund **Express Abandonment Request** Information Disclosure Statement CD, Number of CD(s)_ Landscape Table on CD Certified Copy of Priority Document(s) Remarks: Response to Missing Parts/ Incomplete Application Response to Missing Parts under 37 CFR 1.52 or 1.53 SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT Firm Name Blackwell Sanders Peper Martin, LLP Signature **Printed Name** Lara Dickey Lewis Date Reg. No. 48,161 1.7.05

CERTIFICATE OF TRANSMISSION/MAILING I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as Express Mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below. Express Mail Label No.: 657567418 Signature

Date

November 7, 2005

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450. If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Brammer 8 1

PTO/SB/82 (09-04)

Approved for use through 11/30/2005. OMB 0651-0035 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE er the Paperwork Reduction Act of 1995, no persons are required to resp

REVOCATION OF POWER OF ATTORNEY WITH **NEW POWER OF ATTORNEY AND** CHANGE OF CORRESPONDENCE ADDRESS

iond to a collection of information unless it displays a valid OMB control number.				
Application Number	10/753,677			
Filing Date	January 8, 2004			
First Named Inventor	Charles E. Tharp			
Art Unit	1724			
Examiner Name	Charles Scott Bushey			
Attorney Docket Number	55599.098470			

I hereby revoke all previous powers of attorney given in the above-identified application:								
	A Power of Attorney is submitted herewith.							
or ⊠	I hereby appoint	per:	27526					
\boxtimes	Please change the correspondence address for the above-identified application to:							
	The address associated with Customer Number: 27526							
OR								
	Firm or Individual Name							
Addres	*		<u>. </u>	-				
City				State		Zip		
Counti Teleph	<u></u>			Fax				
I am th				гах				
	Applicant/Inventor.							
Assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)								
#IGNATURE of Applicant or Assignee of Record								
Signature Signature								
Name	CHA	RIES EI/TH	HARP			1 -0 5		
Date	SERT	30 2005		Telephon	e 573	-474	-9456	
NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.								
*Total of 8 forms are submitted.								

This collection of information is required by 37 CFR 1.36. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 3 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

PTO/SB/96 (09-04) Approved for use through 07/31/2006. OMB 0651-0031

NOV 0 7 2005

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE der the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

STATEMENT UNDER 37 CFR 3.73(b) Applicant/Patent Owner: Charles E. Tharp Filed/Issue Date: January 8, 2004 Application No./Patent No.: 10/753,677 Entitled: Membrane Diffuser With Uniform Gas Distribution Environmental Dynamics, Inc. , a Corporation (Name of Assignee) (Type of Assignee, e.g., corporation, partnership, university, government agency, etc.) states that it is: 1. X the assignee of the entire right, title, and interest; or an assignee of less than the entire right, title and interest. The extent (by percentage) of its ownership interest is % in the patent application/patent identified above by virtue of either: A. X An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel 014961, Frame 0076, or for which a copy thereof is attached. OR B. l A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as shown The document was recorded in the United States Patent and Trademark Office at Reel _____, Frame _____, or for which a copy thereof is attached. 2. From: To: The document was recorded in the United States Patent and Trademark Office at Reel _____, Frame _____, or for which a copy thereof is attached. 3. From: The document was recorded in the United States Patent and Trademark Office at Reel _____, Frame _____, or for which a copy thereof is attached. Additional documents in the chain of title are listed on a supplemental sheet. Copies of assignments or other documents in the chain of title are attached. [NOTE: A separate copy (i.e., the original assignment document or a true copy of the original document) must be submitted to Assignment Division in accordance with 37 CFR Part 3, if the assignment is to be recorded in the records of the USPTO. See MPEP 302.08] The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

This collection of information is required by 37 CFR 3.73(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.





UNITED STATES PATENT AND TRADEMARK OFFICE

UNDER SECRETARY OF COMMERCE FOR INTELLECTUAL PROPERTY AND DIRECTOR OF THE UNITED STATES PATENT AND TRADEMARK OFFICE

AUGUST 09, 2004

PTAS

102764198A

SHOOK, HARDY & BACON L.L.P. RICHARD R. JOHNSON 2555 GRAND BLVD. KANSAS CITY, MO 64108-2613

UNITED STATES PATENT AND TRADEMARK OFFICE NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 01/08/2004

REEL/FRAME: 014961/0076

NUMBER OF PAGES: 4

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

THARP, CHARLES E.

DOC DATE: 01/05/2004

ASSIGNEE:

ENVIRONMENTAL DYNAMICS, INC. 5601 PARIS ROAD COLUMBIA, MISSOURI 65202

SERIAL NUMBER: 10753677

FILING DATE: 01/08/2004

PATENT NUMBER:

ISSUE DATE:

TITLE: MEMBRANE DIFFUSER WITH UNIFORM GAS DISTRIBUTION



THERESA FREDERICK, EXAMINER ASSIGNMENT DIVISION OFFICE OF PUBLIC RECORDS



102764198 Attorney Docket No. ENDY.98470 RECORDATION FORM COVER SHEET

FOH	IM P1/O-1595	1.8.64 PAT		S ONLY	PATENT AND TRADEMARK OFFICE		
	To The Honora	able Commissioner of Patents and Traden	narks:	Please record the at	ached original documents or copy thereof.		
1.	Name of conveying party(ies): Charles E. Tharp 2. Name and address of receiving party(ies):						
	tional name(s) of co	onveying party(ies) attached?		Name:	Environmental Dynamics, Inc.		
3.	Nature of Convey	vance:	1	Street Address:	5601 Paris Road		
 ⊠ A	, Assignment	. ☐ Merger		City:	Columbia		
l _	Security Agreement	_/		State:	Missouri		
	Other:			Zip:	65202		
Exec	Execution Date: January 5, 2004			Additional name(s)	& address(es) attached? Yes No		
4.	Application number	er(s) or patent number(s):	75.	3677			
	If this document is	s being filed together with a new application	on, the	execution date of the	application is: January 5, 2004.		
	A. Patent Applica	ation No.(s):	В.	Patent No.(s):			
		Additional numbers	attach	ed? 🗌 Yes 🛛	③ No		
5.	 Name and address of party to whom correspondence concerning document should be mailed: 			Total number of ap	plications and patents involved: 1 3.41) \$40.00		
	Name:	Richard R. Johnson		Enclosed	(See Patent Application Transmittal Form)		
	Internal Address:	Shook, Hardy & Bacon L.L.P.	on L.L.P.				
	Street Address:	2555 Grand Blvd.		Authorized to	be charged to deposit account any deficiencies.		
	City:	Kansas City	8.	Deposit Account N	o.: 19-2112		
	State:	Missouri		(Attach duplicate c	ppy of this page if paying by deposit account)		
	Zip:	64108-2613	<u></u>				
DO NOT USE THIS SPACE							
9.	Statement and sig	gnature.					
	To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.						
Richard R. Johnson, Reg. No. 27,452 Mark Mark Mark 1 - 8 - 0 4							
Name of person signing Signature Date Total number of pages including cover sheet, attachments, and document: 3							

Mail documents to be recorded with required cover sheet information to:

Mail Stop Assignment Recordation Services

Director of the US Patent and Trademark Office P.O. Box 1450

Alexandria, VA 22313-1450

0;/12/2004 STEUMEL1 00000080 10753677

01 FC:8021

40.00 OP

ess Mail No. EV 369936752 US

ASSIGNMENT

WHEREAS, I, Charles E. Tharp, of 2905 Bluff Cr. Drive, Columbia, in the County of Boone, and State of Missouri, have invented certain new and useful improvements in MEMBRANE DIFFUSER WITH UNIFORM GAS DISTRIBUTION for which I am about to make application for Letters Patent of the United States; and

WHEREAS, ENVIRONMENTAL DYNAMICS, INC., a corporation duly organized under the laws of the State of Missouri, and having its principal place of business at 5601 Paris Road, Columbia, County of Boone, and State of Missouri, is desirous of acquiring an interest in, to and under said invention, said application and any and all Letters Patent which may be granted for or upon said invention in the United States of America and all countries foreign thereto;

NOW, THEREFORE, to all whom it may concern, be it known that for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, I, Charles E. Tharp, have sold, assigned and transferred, and by these presents do sell, assign and transfer unto said ENVIRONMENTAL DYNAMICS, INC., the full and exclusive right, title and interest, throughout the world, in, to and under said invention as fully set forth and described in the specification prepared and executed by me on even date herewith preparatory to obtaining Letters Patent of the United States therefor; in, to and under said application; in, to and under any and all refilings, divisions and continuations of said application; in, to and under any and all Letters Patent of the United States of America which may issue from said application, refilings, divisions and continuations; in, to and under any and all reissues of said Letters Patent of the United States of America; in, to and under any and all applications for Letters Patent upon said invention which may hereafter be filed in any and all countries foreign to the United States of America; in, to and under any and all refilings, divisions and continuations of said foreign-filed

applications; in, to and under any and all Letters Patent of countries foreign to the United States of America, which may issue from the said foreign-filed applications, refilings, divisions and continuations; and in, to and under any and all extensions of, and additions to, said Letters Patent of countries foreign to the United States of America, the same to be held and enjoyed by said ENVIRONMENTAL DYNAMICS, INC. for its own use and behoof, and for its successors, legal representatives and assigns, to the full end of the term for which said Letters Patent may be granted, and I do hereby authorize and request the Commissioner of Patents to issue the said Letters Patent in accordance with this assignment.

EXECUTED this 5.

1 / / / / / C

Charles E. Tharp

STATE OF Missoure

: ss

COUNTY OF Brown

Before me personally appeared Charles E. Tharp, to me known to be the person described in, and who executed the foregoing instrument, and he duly acknowledged to me that he executed the same for the uses and purposes therein set forth, on the day and year aforesaid.

Notary Public

SEAL

My Commission Expires:

70/23/2004

CYNTHIA J. STOERKER Notary Public - Notary Seal State of Missouri County of Boone

My Commission Expires October 23, 2004

I hereby appoint the following attorneys to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith and to file and prosecute any corresponding foreign applications, including any international applications under the Patent Cooperation Treaty or the European Patent Convention: William B. Kircher, Reg. No. 22,481; Joseph B. Bowman, Reg. No. 25,807; Peter W. Gowdey, Reg. No. 25,872; Richard R. Johnson, Reg. No. 27,452; Walter R. Brookhart, Reg. No. 29,518; James H. Riley, II, Reg. No. 31,131; Joan Optican Herman, Reg. No. 31,968; Michael B. Hurd, Reg. No. 32,241; Patrick A. Lujin, Reg. No. 35,260; Scott D. Balderston, Reg. No. 35,436; Michael J. Gross, Reg. No. 35,528; William P. Jensen, Reg. No. 36,833; Kerry H. Owens, Reg. No. 37,412; Daniel W. Shinn, Reg. No. 40,810; B. Trent Webb, Reg. No. 40,865; Scott B. Strohm, Reg. No. 42,172; Janine A. Carlan, Reg. No. 42,387; Clinton G. Newton, Reg. No. 42,930; Jeffrey B. Williams, Reg. No. 43,269; John K. Hsu, Reg. No. 45,563; Greg S. Donahue, Reg. No. 47,531; Justin Krieger, Reg. No. 47,719; Marshall Honeyman, Reg. No. 48,114; Bart A. Starr, Reg. No. 48,386; Jean M. Dickman, Reg. No. 48,538; Eric A. Buresh, Reg. No. 50,394; Christopher J. Eaton, Reg. No. 51,143; Jesse J. Camacho, Reg. No. 51,258; Adam P. Seitz, Reg. No. 52,206; John E. Gibson, Reg. No. 52,944; and D. Wade Schnell, Reg. No. 53,563. Address all correspondence to: Richard R. Johnson, SHOOK, HARDY & BACON L.L.P., 2555 Grand Blvd., Kansas City, Missouri 64108-2613, telephone number (816) 474-6550.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Inventor's signature

Charles E. Tharp

Residence:

Columbia, Boone County, Missouri

Citizenship:

United States of America

Post Office Address:

2905 Bluff Cr. Drive Columbia, Missouri 65201